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A'
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 Pro Glu Glu Leu Thr Asn Ala Leu Glu Ile Ser Asn Ile Val Phe Thr
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 Pro Ser Val Asp Gly Asp Gly Asp Arg Lys Lys Arg Leu Ala Leu Val
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a!
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a!
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Gln Phe Val Leu Val Asn Val Val Ile Ala Val Leu Met Lys His Leu
1845 1850 1855

Glu Glu Ser Asn Lys Glu Ala Lys Glu Glu Ala Glu Leu Glu Ala Glu
1860 1865 1870

Leu Glu Leu Glu Met Lys Thr Leu Ser Pro Gln Pro His Ser Pro Leu
1875 1880 1885

Gly Ser Pro Phe Leu Trp Pro Gly Val Glu Gly Val Asn Ser Pro Asp
1890 1895 1900

Ser Pro Lys Pro Gly Ala Pro His Thr Thr Ala His Ile Gly Ala Ala
1905 1910 1915 1920

Ser Gly Phe Ser Leu Glu His Pro Thr Met Val Pro His Pro Glu Glu
1925 1930 1935

Val Pro Val Pro Leu Gly Pro Asp Leu Leu Thr Val Arg Lys Ser Gly
1940 1945 1950

Val Ser Arg Thr His Ser Leu Pro Asn Asp Ser Tyr Met Cys Arg Asn
1955 1960 1965

Gly Ser Thr Ala Glu Arg Ser Leu Gly His Arg Gly Trp Gly Leu Pro
1970 1975 1980

Lys Ala Gln Ser Gly Ser Ile Leu Ser Val His Ser Gln Pro Ala Asp
1985 1990 1995 2000

al
Cont.

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 Pro His Gly Ala Pro Thr Trp Gly Ala Ile Pro Lys Leu Pro Pro Pro
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 Ser Lys Val Ser Lys His Ile Arg Leu Pro Ala Pro Cys Pro Gly Leu
 2100 2105 2110
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 2245 2250 2255

Ser Ser Pro Leu Asp Ser Thr Ala Ala Ser Pro Ser Pro Lys Lys Asp
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Thr Leu Ser Leu Ser Gly Leu Ser Ser Asp Pro Thr Asp Met Asp Pro
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Val Leu Pro Thr Leu Pro His His Leu Ser Pro Pro Gly Ala Asp Pro
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 2305 2310 2315 2320

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Leu Pro Thr Pro Gly Ala
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<213> Rattus sp.

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al
Cont.

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 Gly Gln Pro Arg Ser Phe Thr Gln Leu Asn Asp Leu Ser Gly Ala Gly
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 Gly Arg Gln Gly Pro Gly Ser Thr Glu Lys Asp Pro Gly Ser Ala Asp
 85 90 95
 Ser Glu Ala Glu Gly Leu Pro Tyr Pro Ala Leu Ala Pro Val Val Phe
 100 105 110
 Phe Tyr Leu Ser Gln Asp Ser Arg Pro Arg Ser Trp Cys Leu Arg Thr
 115 120 125
 Val Cys Asn Pro Trp Phe Glu Arg Val Ser Met Leu Val Ile Leu Leu
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 Asn Cys Val Thr Leu Gly Met Phe Arg Pro Cys Glu Asp Ile Ala Cys
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a!
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Phe	Gly	Lys	Lys	Cys	Tyr	Leu	Gly	Asp	Thr	Trp	Asn	Arg	Leu	Asp	Phe	195	200	205
Phe	Ile	Val	Ile	Ala	Gly	Met	Leu	Glu	Tyr	Ser	Leu	Asp	Leu	Gln	Asn	210	215	220
Val	Ser	Phe	Ser	Ala	Val	Arg	Thr	Val	Arg	Val	Leu	Arg	Pro	Leu	Arg	225	230	235
Ala	Ile	Asn	Arg	Val	Pro	Ser	Met	Arg	Ile	Leu	Val	Thr	Leu	Leu	Leu	245	250	255
Asp	Thr	Leu	Pro	Met	Leu	Gly	Asn	Val	Leu	Leu	Leu	Cys	Phe	Phe	Val	260	265	270
Phe	Phe	Ile	Phe	Gly	Ile	Val	Gly	Val	Gln	Leu	Trp	Ala	Gly	Leu	Leu	275	280	285
Arg	Asn	Arg	Cys	Phe	Leu	Pro	Glu	Asn	Phe	Ser	Leu	Pro	Leu	Ser	Val	290	295	300
Asp	Leu	Glu	Pro	Tyr	Tyr	Gln	Thr	Glu	Asn	Glu	Asp	Glu	Ser	Pro	Phe	305	310	315
Ile	Cys	Ser	Gln	Pro	Arg	Glu	Asn	Gly	Met	Arg	Ser	Cys	Arg	Ser	Val	325	330	335
Pro	Thr	Leu	Arg	Gly	Glu	Gly	Gly	Gly	Gly	Pro	Pro	Cys	Ser	Leu	Asp	340	345	350
Tyr	Glu	Thr	Tyr	Asn	Ser	Ser	Ser	Asn	Thr	Thr	Cys	Val	Asn	Trp	Asn	355	360	365
Gln	Tyr	Tyr	Thr	Asn	Cys	Ser	Ala	Gly	Glu	His	Asn	Pro	Phe	Lys	Gly	370	375	380
Ala	Ile	Asn	Phe	Asp	Asn	Ile	Gly	Tyr	Ala	Trp	Ile	Ala	Ile	Phe	Gln	385	390	395
Val	Ile	Thr	Leu	Glu	Gly	Trp	Val	Asp	Ile	Met	Tyr	Phe	Val	Met	Asp	405	410	415

al
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Phe Ser Glu Thr Lys Gln Arg Glu Ser Gln Leu Met Arg Glu Gln Arg
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Val Arg Phe Leu Ser Asn Ala Ser Thr Leu Ala Ser Phe Ser Glu Pro
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Gly Ser Cys Tyr Glu Glu Leu Leu Lys Tyr Leu Val Tyr Ile Leu Arg
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Lys Ala Ala Arg Arg Leu Ala Gln Val Ser Arg Ala Ile Gly Val Arg
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Ala Gly Leu Leu Ser Ser Pro Val Ala Arg Ser Gly Gln Glu Pro Gln
515 520 525

Pro Ser Gly Ser Cys Thr Arg Ser His Arg Arg Leu Ser Val His His
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Leu Val His His His His His His His His Tyr His Leu Gly Asn
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Gly Thr Leu Arg Val Pro Arg Ala Ser Pro Glu Ile Gln Asp Arg Asp
565 570 575

Ala Asn Gly Ser Arg Arg Leu Met Leu Pro Pro Pro Ser Thr Pro Thr
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Pro Ser Gly Gly Pro Pro Arg Gly Ala Glu Ser Val His Ser Phe Tyr
595 600 605

His Ala Asp Cys His Leu Glu Pro Val Arg Cys Gln Ala Pro Pro Pro
610 615 620

Arg Cys Pro Ser Glu Ala Ser Gly Arg Thr Val Gly Ser Gly Lys Val
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Tyr Pro Thr Val His Thr Ser Pro Pro Pro Glu Ile Leu Lys Asp Lys
645 650 655

Ala Leu Val Glu Val Ala Pro Ser Pro Gly Pro Pro Thr Leu Thr Ser
660 665 670

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cont.

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 915 920 925

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965 970 975
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Lys Ser Pro Pro Ser Ala Arg Ser Ser Pro His Ser Pro Trp Ser Ala
1140 1145 1150
Ala Ser Ser Trp Thr Ser Arg Arg Ser Ser Arg Asn Ser Leu Gly Arg
1155 1160 1165
Ala Pro Ser Leu Lys Arg Arg Ser Pro Ser Gly Glu Arg Arg Ser Leu
1170 1175 1180

*Al
Cont.*

Leu Ser Gly Glu Gly Gln Glu Ser Gln Asp Glu Glu Glu Ser Ser Glu
 1185 1190 1195 1200
 Glu Asp Arg Ala Ser Pro Ala Gly Ser Asp His Arg His Arg Gly Ser
 1205 1210 1215
 Leu Glu Arg Glu Ala Lys Ser Ser Phe Asp Leu Pro Asp Thr Leu Gln
 1220 1225 1230
 Val Pro Gly Leu His Arg Thr Ala Ser Gly Arg Ser Ser Ala Ser Glu
 1235 1240 1245
 His Gln Asp Cys Asn Gly Lys Ser Ala Ser Gly Arg Leu Ala Arg Thr
 1250 1255 1260
 Leu Arg Thr Asp Asp Pro Gln Leu Asp Gly Asp Asp Asp Asn Asp Glu
 1265 1270 1275 1280
 Gly Asn Leu Ser Lys Gly Glu Arg Ile Gln Ala Trp Val Arg Ser Arg
 1285 1290 1295
 Leu Pro Ala Cys Cys Arg Glu Arg Asp Ser Trp Ser Ala Tyr Ile Phe
 1300 1305 1310
 Pro Pro Gln Ser Arg Phe Arg Leu Leu Cys His Arg Ile Ile Thr His
 1315 1320 1325
 Lys Met Phe Asp His Val Val Leu Val Ile Ile Phe Leu Asn Cys Ile
 1330 1335 1340
 Thr Ile Ala Met Glu Arg Pro Lys Ile Asp Pro His Ser Ala Glu Arg
 1345 1350 1355 1360
 Ile Phe Leu Thr Leu Ser Asn Tyr Ile Phe Thr Ala Val Phe Leu Ala
 1365 1370 1375
 Glu Met Thr Val Lys Val Val Ala Leu Gly Trp Cys Phe Gly Glu Gln
 1380 1385 1390
 Ala Tyr Leu Arg Ser Ser Trp Asn Val Leu Asp Gly Leu Leu Val Leu
 1395 1400 1405
 Ile Ser Val Ile Asp Ile Leu Val Ser Met Val Ser Asp Ser Gly Thr
 1410 1415 1420
 Lys Ile Leu Gly Met Leu Arg Val Leu Arg Leu Leu Arg Thr Leu Arg
 1425 1430 1435 1440

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 cont.

Pro Leu Arg Val Ile Ser Arg Ala Gln Gly Leu Lys Leu Val Val Glu
 1445 1450 1455
 Thr Leu Met Ser Ser Leu Lys Pro Ile Gly Asn Ile Val Val Ile Cys
 1460 1465 1470
 Cys Ala Phe Phe Ile Ile Phe Gly Ile Leu Gly Val Gln Leu Phe Lys
 1475 1480 1485
 Gly Lys Phe Phe Val Cys Gln Gly Glu Asp Thr Arg Asn Ile Thr Asn
 1490 1495 1500
 Lys Ser Asp Cys Ala Glu Ala Ser Tyr Arg Trp Val Arg His Lys Tyr
 1505 1510 1515 1520
 Asn Phe Asp Asn Leu Gly Gln Ala Leu Met Ser Leu Phe Val Leu Ala
 1525 1530 1535
 Ser Lys Asp Gly Trp Val Asp Ile Met Tyr Asp Gly Leu Asp Ala Val
 1540 1545 1550
 Gly Val Asp Gln Gln Pro Ile Met Asn His Asn Pro Trp Met Leu Leu
 1555 1560 1565
 Tyr Phe Ile Ser Phe Leu Leu Ile Val Ala Phe Phe Val Leu Asn Met
 1570 1575 1580
 Phe Val Gly Val Val Val Glu Asn Phe His Lys Cys Arg Gln His Gln
 1585 1590 1595 1600
 Glu Glu Glu Glu Ala Arg Arg Arg Glu Glu Lys Arg Leu Arg Arg Leu
 1605 1610 1615
 Glu Lys Lys Arg Arg Asn Leu Met Leu Asp Asp Val Ile Ala Ser Gly
 1620 1625 1630
 Ser Ser Ala Ser Ala Ala Ser Glu Ala Gln Cys Lys Pro Tyr Tyr Ser
 1635 1640 1645
 Asp Tyr Ser Arg Phe Arg Leu Leu Val His His Leu Cys Thr Ser His
 1650 1655 1660
 Tyr Leu Asp Leu Phe Ile Thr Gly Val Ile Gly Leu Asn Val Val Thr
 1665 1670 1675 1680
 Met Ala Met Glu His Tyr Gln Gln Pro Gln Ile Leu Asp Glu Ala Leu
 1685 1690 1695

Lys Ile Cys Asn Tyr Ile Phe Thr Val Ile Phe Val Phe Glu Ser Val
 1700 1705 1710
 Phe Lys Leu Val Ala Phe Gly Phe Arg Arg Phe Phe Gln Asp Arg Trp
 1715 1720 1725
 Asn Gln Leu Asp Leu Ala Ile Val Leu Leu Ser Ile Met Gly Ile Thr
 1730 1735 1740
 Leu Glu Glu Ile Glu Val Asn Ala Ser Leu Pro Ile Asn Pro Thr Ile
 1745 1750 1755 1760
 Ile Arg Ile Met Arg Val Leu Arg Ile Ala Arg Val Leu Lys Leu Leu
 1765 1770 1775
 Lys Met Ala Val Gly Met Arg Ala Leu Leu Asp Thr Val Met Gln Ala
 1780 1785 1790
 Leu Pro Gln Val Gly Asn Leu Gly Leu Leu Phe Met Leu Leu Phe Phe
 1795 1800 1805
 Ile Phe Ala Ala Leu Gly Val Glu Leu Phe Gly Asp Leu Glu Cys Asp
 1810 1815 1820
 Glu Thr His Pro Cys Glu Gly Leu Gly Arg His Ala Thr Phe Arg Asn
 1825 1830 1835 1840
 Phe Gly Met Ala Phe Leu Thr Leu Phe Arg Val Ser Thr Gly Asp Asn
 1845 1850 1855
 Trp Asn Gly Ile Met Lys Asp Thr Leu Arg Asp Cys Asp Gln Glu Ser
 1860 1865 1870
 Thr Cys Tyr Asn Thr Val Ile Ser Pro Ile Tyr Phe Val Ser Phe Val
 1875 1880 1885
 Leu Thr Ala Gln Phe Val Leu Val Asn Val Val Ile Ala Val Leu Met
 1890 1895 1900
 Lys His Leu Glu Glu Ser Asn Lys Glu Ala Lys Glu Glu Ala Glu Leu
 1905 1910 1915 1920
 Glu Ala Glu Leu Glu Leu Glu Met Lys Thr Leu Ser Pro Gln Pro His
 1925 1930 1935
 Ser Pro Leu Gly Ser Pro Phe Leu Trp Pro Gly Val Glu Gly Val Asn
 1940 1945 1950

Ser Pro Asp Ser Pro Lys Pro Gly Ala Pro His Thr Thr Ala His Ile
 1955 1960 1965
 Gly Ala Ala Ser Gly Phe Ser Leu Glu His Pro Thr Met Val Pro His
 1970 1975 1980
 Pro Glu Glu Val Pro Val Pro Leu Gly Pro Asp Leu Leu Thr Val Arg
 1985 1990 1995 2000
 Lys Ser Gly Val Ser Arg Thr His Ser Leu Pro Asn Asp Ser Tyr Met
 2005 2010 2015
 Cys Arg Asn Gly Ser Thr Ala Glu Arg Ser Leu Gly His Arg Gly Trp
 2020 2025 2030
 Gly Leu Pro Lys Ala Gln Ser Gly Ser Ile Leu Ser Val His Ser Gln
 2035 2040 2045
 Pro Ala Asp Thr Ser Cys Ile Leu Gln Leu Pro Lys Asp Val His Tyr
 2050 2055 2060
 Leu Leu Gln Pro His Gly Ala Pro Thr Trp Gly Ala Ile Pro Lys Leu
 2065 2070 2075 2080
 Pro Pro Pro Gly Arg Ser Pro Leu Ala Gln Arg Pro Leu Arg Arg Gln
 2085 2090 2095
 Ala Ala Ile Arg Thr Asp Ser Leu Asp Val Gln Gly Leu Gly Ser Arg
 2100 2105 2110
 Glu Asp Leu Leu Ser Glu Val Ser Gly Pro Ser Cys Pro Leu Thr Arg
 2115 2120 2125
 Ser Ser Ser Phe Trp Gly Gly Ser Ser Ile Gln Val Gln Gln Arg Ser
 2130 2135 2140
 Gly Ile Gln Ser Lys Val Ser Lys His Ile Arg Leu Pro Ala Pro Cys
 2145 2150 2155 2160
 Pro Gly Leu Glu Pro Ser Trp Ala Lys Asp Pro Pro Glu Thr Arg Ser
 2165 2170 2175
 Ser Leu Glu Leu Asp Thr Glu Leu Ser Trp Ile Ser Gly Asp Leu Leu
 2180 2185 2190
 Pro Ser Ser Gln Glu Glu Pro Leu Ser Pro Arg Asp Leu Lys Lys Cys
 2195 2200 2205

a'
 cont.

Tyr Ser Val Glu Thr Gln Ser Cys Arg Arg Arg Pro Gly Ser Trp Leu
 2210 2215 2220
 Asp Glu Gln Arg Arg His Ser Ile Ala Val Ser Cys Leu Asp Ser Gly
 2225 2230 2235 2240
 Ser Gln Pro Arg Leu Cys Pro Ser Pro Ser Ser Leu Gly Gly Gln Pro
 2245 2250 2255
 Leu Gly Gly Pro Gly Ser Arg Pro Lys Lys Lys Leu Ser Pro Pro Ser
 2260 2265 2270
 Ile Ser Ile Asp Pro Pro Glu Ser Gln Gly Ser Arg Pro Pro Cys Ser
 2275 2280 2285
 Pro Gly Val Cys Leu Arg Arg Arg Ala Pro Ala Ser Asp Ser Lys Asp
 2290 2295 2300
 Pro Ser Val Ser Ser Pro Leu Asp Ser Thr Ala Ala Ser Pro Ser Pro
 2305 2310 2315 2320
 Lys Lys Asp Thr Leu Ser Leu Ser Gly Leu Ser Ser Asp Pro Thr Asp
 2325 2330 2335
 Met Asp Pro Val Leu Pro Thr Leu Pro His His Leu Ser Pro Pro Gly
 2340 2345 2350
 Ala Asp Pro Ser Ser Ala Ser Trp Ala Ala Phe Leu Lys Ser Pro Thr
 2355 2360 2365
 Ala Ala Ser Ser His Glu Ala Pro His Leu Pro Ser Ser Val Ala Gly
 2370 2375 2380
 Gly Asp Asp Glu Gln Asn Phe Arg Arg Val Asp Leu Lys Arg Thr Gln
 2385 2390 2395 2400
 Pro Trp Ser Pro Cys Leu Arg Glu Glu Gly Lys Gly Glu Ser Pro Val
 2405 2410 2415
 Trp Pro Arg Leu Pro Thr Pro Gly Ala
 2420 2425

<210> 5
 <211> 7
 <212> PRT
 <213> Rattus sp.

<400> 5
Ser Lys Glu Lys Gln Met Ala
1 5

<210> 6
<211> 17
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer
Sequence

<400> 6
tngchatgga gmgnc cy

17

<210> 7
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer
Sequence

<400> 7
cttbcccttg aasactg

18

<210> 8
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer
Sequence

<400> 8
ccgctgtcgg agaccatgga gacc

24

<210> 9
<211> 25
<212> DNA
<213> Artificial Sequence

Al
cont

<220>

<223> Description of Artificial Sequence: Primer
Sequence

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agcggcccaa aattgacccc cacag

25

<210> 10

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer
Sequence

<400> 10

gaagatgcga gtggacag

18

<210> 11

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer
Sequence

<400> 11

ctgtggcgat ggtcactg

18